

Appl. No. 09/759,179

IN THE CLAIMS

Please amend Claims 1 and 6; and add new Claims 11-14 as follows.

1. (Currently Amended) A stamp (10) for use in a lithographic process, which stamp (10) comprises a stamp body (5) with a printing face (3), said stamp body (5) having a first recess (11) with an aperture (15) in the printing face (3), wherein

the first recess (11) becomes narrower as its distance to the printing face (3) increases, and

cross-sections of the first recess (11) parallel to the printing face (3), when projected perpendicularly on the printing face (3), lie within the aperture (15), and a third recess (13) with an aperture (17) in the printing face (3) and a depth perpendicular to the printing face that is greater than the depth of the first recess is present in the stamp body (5),

which recess (13) has cross-sections parallel to the printing face (3) and becomes substantially narrower as its distance to the printing face (3) increases, said cross-sections, when projected perpendicularly on the printing face (3), lying within the aperture (17),

the aperture (17) of the third recess (13) and the aperture (15) of the first recess (11) each have a dimension in a first direction in the printing face (3), and

said dimension of the aperture (17) of the third recess (13) is at least five times the dimension of said aperture (15) of the first recess (11), wherein at least one of the first and third recesses has a triangular shape in a plane perpendicular to the printing face;

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wherein the stamp body has a Young modulus greater than 10^6 N/m², and
the stamp body further has an elastic layer disposed therein.

2. (Original) A stamp (10) as claimed in claim 1, characterized in that the first recess (11) has a triangular shape in a first plane perpendicular to the printing face (3).

3. (Original) A stamp (10) as claimed in Claim 1, characterized in that a second recess (12) with an opening (16) in the printing face (3) is present in the stamp body (5),

which second recess (12) has cross-sections parallel to the printing face (3) and becomes narrower as its distance to the printing face (3) increases, said cross-sections, when projected perpendicularly on the printing face (3), lie within the aperture (16), and said aperture (16) is present at a distance smaller than 1 μ m from the aperture (15) of the first recess (11).

4. (Cancelled)

5. (Previously Presented) A stamp (10) as claimed in claim 1, characterized in that said dimension of the aperture (17) of the third recess (13) is at least twenty times said dimension of the aperture (15) of the first recess (11).

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6. (Currently Amended) A method of manufacturing a stamp (10) for use in a lithographic process, which stamp (10, 110) has a stamp body (5, 105) with a surface (4, 104) which coincides partly with the printing face (3, 103), comprising the steps of:

anisotropic etching of a surface (27) of a mold (20) into a patterned mold surface (29), such that a first recess (21) and a second recess (23) are created in the mold (20) with apertures in the original surface (27), which first recess (21) and a second recess (23) become narrower as its distance to the original surface (27) increases and has cross-sections parallel to the original surface (27) which, when projected perpendicularly on the original surface (27), lie within the aperture (41), and wherein the first and second recesses have different apertures;

disposing an unmolding agent between the mold and a first body; and
making a replica of the patterned mold surface (29) in a the first body (105) with a patterned surface (104), wherein the replica contains structures of different sizes.

7. (Original) A method as claimed in claim 6, characterized in that a replica is made of the patterned surface (104) of the first body (105) in a second body (5) which has a patterned surface (4).

8. - 10. (Cancelled)

11. (New) The method of Claim 6, wherein the unmolding agent is disposed on a surface of the mold.

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12. (New) The method of Claim 6, wherein the unmolding agent is disposed on a surface of the first body.

13. (New) The method of Claim 6, wherein the unmolding agent comprises fluorosilane.

14. (New) The method of Claim 13, wherein disposing the unmolding agent comprises vacuum deposition.